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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/502,047      | 07/29/2004  | Yasuo Ibuki          | P25723              | 2453             |

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| EXAMINER |
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MICHALSKI, SEAN M

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| ART UNIT | PAPER NUMBER |
|----------|--------------|

3724

DATE MAILED: 08/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |                                     |  |
|------------------------------|--------------------------------------|-------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/502,047 | <b>Applicant(s)</b><br>IBUKI ET AL. |  |
|                              | <b>Examiner</b><br>Sean M. Michalski | <b>Art Unit</b><br>3725             |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/25/06; 4/08/05. 10/29/04</u> | 6) <input checked="" type="checkbox"/> Other: <u>IDS 10/29/2004.</u>                    |

## DETAILED ACTION

### *Specification*

1. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a *concise* statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains.

*Extensive mechanical and design details of apparatus should not be given.*

Applicant should consider rephrasing and shortening the abstract, to better conform to the accepted abstracting procedure as described above. The current abstract is too long.

### *Drawings*

2. The drawings are objected to because they are messy and have stray markings on each page. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the

examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. All the claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.
3. Claims 1-14 recites the limitation "the blade" in multiple locations. There is insufficient antecedent basis for this limitation in all of the claims. Two blades are set forth in claim 1, from which all others depend, making reference to "the blade" unacceptable.

Further problems with antecedent basis follow:

Claim 3: "the moving speeds" line 3, where previously only "a ... moving speed" was set forth.

Claim 6: "the ON-state" lacks antecedent basis.

Claim 8: "the driving of the blade" in lines 2-4 lacks antecedent basis.

Claim 9: "the driving of the blade" lacks antecedent basis.

Claim 10: "the driving of the blade" lacks antecedent basis.

Claim 12: "the ON-state" in lines 5 and 7 lacks antecedent basis.

Claim 14: "the integration time" lacks antecedent basis.

4. Regarding claim 1, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention.

See MPEP § 2173.05(d).

5. Claim 3 specifies that a maximum speed is 60, but also a speed must be greater than 20. It is unclear from the wording whether the applicant intends to claim the range 20-60 meters per minute, all speeds under 60 including 20, one speed that must be greater than 20 and may be greater than 60 and one speed that must be less than 60 and may be less than 20, or some other range that Examiner cannot discern. The wording of this claim is so confusing and imprecise as to make the scope of the claim unascertainable.

6. Claim 5 recites, "the blade is driven in a combined order of the multiple drive modes". This does not make sense. The scope of the limitation "in a combined order" is unascertainable. This claim is indefinite.

7. Claim 8 recites "upon lapse... after suspension... while the electric razor is operated in the cleaning drive mode". It is unclear whether the blade is moving or is suspended at any given point, as recited in the claim. This claim is indefinite.

8. Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: There is recited a third duration that the blade is driven for, and a corresponding suspension afterward.

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There is not any indication of how or when the third duration begins. Previously applicant sets forth a first duration of driving, a second duration BEING A PAUSE IN ACTIVATION, and the reactivation of the blade. It is unclear whether this reactivation is the start of the third duration, or exactly how the third duration should be interpreted.

This claim is not understandable in relation to the elements previously claimed.

9. Claim 12 is rejected under 35 U.S.C. 112, second paragraph because the meaning of the claim is unascertainable. It is replete with grammatical errors that render a proper understanding of the claim impossible to ascertain. For example, "if it is judged that the ON-state time of the switch has not reached the predetermined time, and in response to turning off of the switch." makes no sense alone or in the full context of the claim. The claim is objected to as being so incomprehensible as to preclude a reasonable search of the prior art by the examiner. Applicant is required to submit an amendment which clarifies the claim so that the examiner may make a proper comparison of the invention with the prior art.

Applicant should be careful not to introduce any new matter into the claim (i.e., matter which is not supported by the disclosure as originally filed).

10. Regarding claim 14, the meaning of the claim is unascertainable. It is replete with grammatical errors that render a proper understanding of the claim impossible to ascertain. For example, "indicating means for integrating a time" makes no sense alone or in the full context of the claim. The claim is objected to as being so incomprehensible as to preclude a reasonable search of the prior art by the examiner. Applicant is

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required to submit an amendment which clarifies the claim so that the examiner may make a proper comparison of the invention with the prior art.

Applicant should be careful not to introduce any new matter into the claim (i.e., matter which is not supported by the disclosure as originally filed).

### ***Claim Objections***

11. The claims contain further grammatical errors and errors in phrasing which render the claims confusing and inadequate. These include:

Claim 1: the recitation of "from a corresponding one" is confusing and should be rephrased.

Claim 2: "than the corresponding one" is confusing and should be rephrased.

Claim 3: 20m or higher per minute should read 20m per minute or higher.

### ***Claim Rejections - 35 USC § 102***

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claims 1, 2, 4, 6-11 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Van Der Borst et al. (USPN 5,671,535).

14. Regarding claim 1, Van Der Borst et al. discloses a shaving apparatus (figure 1) having moving inner blades and stationary outer blades that cooperate to nip whisker

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hairs from faces. The Electric razor as disclosed has three settings, 'P', 'M', and 'C', each of which has a different blade movement speed function. See column 14 lines 20-50. The movement speed may also be referred to as 'the number of revolutions per unit time', or 'driving frequency'. Mode P may be called a 'normal mode' and mode C may be called a cleaning mode, since the device is capable of being cleaned in mode C.

15. Regarding claim 2, Van Der Borst et al. discloses that the cutting frequency (motor speed, revolutions per unit time) is smaller in the cutting mode C than in normal mode P. See column 14 lines 30-40.

16. Regarding claim 5, Van Der Borst et al. discloses that there are multiple drive modes that are the cleaning mode. Both mode M and mode C are cleaning modes, and both are differentiated from the normal mode in the number of revolutions and driving frequency. Both M and C are driven with different functions (that is, different controllers) so their motor speeds and driving frequencies are different than the corresponding ones of the normal mode (mode P).

17. Regarding claim 6, Van Der Borst et al. discloses that the razor is operated in response to the turning on of a switch (61 figure 1) and that the mode of the razor is capable of being switched from the P mode to the cleaning mode (C or M) after a predetermined time. This is accomplished by a user waiting a predetermined time in the "ON-state" and then using 207 figure 1 to change into cleaning mode. The switch 61 stays in the on-position while the razor goes into a cleaning mode after a predetermined time.



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18. Regarding claim 7, Van Der Borst et al. discloses that the moving blade (the inner driven blade) may be suspended (stopped) after the blade is driven in the cleaning drive mode for a predetermined time. A user may simply drive the blade in the cleaning drive mode C for a predetermined time (say 5 minutes) and then use switch 61 to 'suspend' the blade.

19. Regarding claim 8, Van Der Borst et al. discloses that the user may first select the cleaning mode C for operation of the razor, and then drive the blade for a first duration, say 1 minute, suspend the motion of the blade by utilizing the switch 61, allow a second duration to pass (with the blade suspended), say 10 hours, and then resume the motion of the blade, again by toggling the switch 61.

20. Regarding claim 9, Van Der Borst et al. discloses that the second activation of the blade may be differentiated from the first activation of the blade by (during the second duration, during which the blade is motionless) moving the selector from C to the alternate cleaning mode M, where the speed and frequency of the blade will differ from the original mode.

21. Regarding claim 10, Van Der Borst et al. discloses that the second cleaning mode consists of having the blade driven with fewer revolutions. If the user had the first driven time be 5 hours, and the second activation be 1 hour in the same mode there would be fewer revolutions. Similarly, but alternatively, the user may have the first cleaning mode be M, and after the second duration (the pause in activation of the moving blade) re-activate the razor in C mode, which will drive at a smaller frequency and have a lower number of rotations *per unit time*.

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22. Regarding claim 11, Van Der Borst et al. discloses that after the blade is driven in cleaning mode for a third (or fourth or any subsequent number of durations) it may be suspended. Again, this is accomplished by toggling the switch 61.

23. Regarding claim 13, Van Der Borst et al. discloses that there are notifying means for notifying a user that the electric razor is operated in the cleaning drive mode. The notifying means are the letters M and C seen in figure 2. The letters in conjunction with 207 notify the user of the cleaning drive mode the razor is set to.

### ***Claim Rejections - 35 USC § 103***

24. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

25. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
26. Claims 3, 5 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Der Borst et al.
27. Regarding claim 3, Van Der Borst et al. discloses every aspect of the invention except the limitation that the speed of the blade is between 20 and 60 meters per minute. It would have been obvious to one having ordinary skill in the art at the time the invention was made to select a range of appropriate speeds for the blades to operate within, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). The motivation to find an appropriate blade speed is that blade speed affects comfort and efficiency (see Dekker). This limitation lacks criticality and unexpected results.
28. Regarding claim 5, Van Der Borst et al. does not disclose that the speed of the cleaning mode is less than the speed of the normal mode, as recited. Van Der Borst et al. teaches multiple modes, some being driven faster than others; see column 14. It would have been obvious to one having ordinary skill in the art at the time the invention was made to select a range of appropriate speeds for the blades to operate within, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Furthermore there is a lack of criticality and unexpected results to this limitation, since applicant has not provided any evidence that this is necessary, and indeed, states that a fast blade is *specifically undesirable* for a cleaning mode.

29. Regarding claim 14, while the claim is incomprehensible, it is vaguely understood by the examiner that there should be an integrator control circuit provided to interact with and control certain aspects of the razors operation. Van Der Borst et al. discloses that there are indicating means (a differentiator, which indicated to the motor when certain time events have occurred), that are operable during all drive modes including normal (P is normal), said means being capable of prompting the user to clean the blade if certain time events occur. If the operation or the razor is altered by given time events, (see column 8 lines 60+) this would be detected by a user and would prompt said user to take action, including cleaning the razor.

While Van Der Borst et al. does not disclose an integrator, Van Der Borst et al. does disclose a differentiator and comparator control circuit for the monitoring of elapsed time. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use an integrator circuit in place of a differentiator and comparator, since both monitor elapsed time, and are art recognized equivalents. (See Kassatly, which is relied on only to the extent that it shows integrators and differentiators to be interchangeable at will: "differentiator 323 could be replaced by an integrator." shows that they are recognized equivalents.)

30. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Van Der Borst et al. in view of Dekker (EP 0 652 087 A1, cited by applicant).

Van Der Borst et al. discloses every aspect of the invention except the limitation that the speed of the blade is between 20 and 60 meters per minute.

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Dekker discloses a blade speed for a cutter as between 0.4 and 1.2 m/s which is known to be between 24 and 72 meters per minute: this overlaps the claimed range of between 20 and 60 m/m. Where the claimed range overlaps or lies within a prior art reference a prima facie case of obviousness exists. See *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976).

In the same field of invention it would have been obvious to one skilled in the art at the time of the invention to modify Van Der Borst et al. by limiting the range to between 20 and 60 m/min. as taught by Dekker. The motivation to combine is that this range is determined to "improve the shaving performance" (see Dekker Abstract).

### ***Conclusion***

31. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Rose, Jr.; Braun; Lang et al.; Momose.

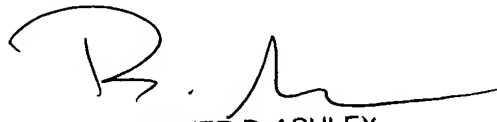
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean M. Michalski whose telephone number is 571-272-6752. The examiner can normally be reached on M-F 7:30AM - 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on 571-272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SMM



BOYER D. ASHLEY  
SUPERVISORY PATENT EXAMINER